REEVALUATION OF FINDING OF NO SIGNIFICANT IMPACT (FONSI)

REVISED FINISHED WATERLINE INSTALLATION PLANS SEVIERVILLE WATER SYSTEMS (SWS) RAW WATER INTAKE AND WATER TREATMENT PLANT – FRENCH BROAD RIVER MILE 27.5L, SEVIER COUNTY, TENNESSEE

Background

On February 4, 2005, TVA completed a FONSI for Section 26a approval of the proposed Sevierville Water Systems (SWS) intake and water treatment plant at French Broad River Mile (FBRM) 27.5. Reevaluations of two subsequent project changes were issued on April 25, 2005, and October 25, 2005.

The original plans approved by TVA included construction of a 36-inch ductile iron finished waterline across the island back channel at FBRM 27.1 (left bank) just downstream of the McCroskey Island Road Bridge. This portion of the finished waterline would connect to the SWS main located on Boyds Creek Road (SR-338) and, with minor modification, is still included in the proposal. In January 2006, once the project was well underway, Jordan Jones and Goulding (JJG), on behalf of SWS, requested an additional project modification described below (see Proposed Modification on Construction and Attachment 1).

Purpose and Need

SWS initiated project construction in the spring of 2005 and now it proposes an additional change in the route of the finished water main pipelines from the water treatment plant to connection points. SWS believes the additional 36-inch water main river crossing from the water treatment plant would allow it to better serve its customers by providing a second source of treated water to the system. Installed at a lower elevation, it is expected that this alignment would require lower head pumps. The cost of installation is expected to be reduced because the City of Sevierville (City) owns the easement along the existing 24-inch sewer line. This route would also allow SWS to connect to the existing City system near the location of future road improvements and anticipated commercial development expansion along Highway 66. This location is also expected to potentially reduce probable conflicts with archaeological resources (Attachment 1).

Proposed Modification on Construction

By letter dated January 16, 2006, JJG, on behalf of SWS, requested that the waterline route be modified by adding a new portion to the line. This change involves the addition of another finished waterline crossing east and about 1,000 feet upstream of the previously approved crossing. This new crossing, outside the “permit area” previously assessed, would include a 36-inch water main. The previously approved portion of the waterline would still be constructed, but would now include a split line that would be reduced to a 16-inch main line. In addition to the 36-inch line at the new river crossing, the route would include a 16-inch finished water main and an 8-inch raw water main (See Attachment 1, Sheet CU1.6A). These new lines are proposed to exit McCroskey Island, cross at approximate FBRM 27.3, and follow the existing route of a 24-inch force main sewer (waste water) line constructed in 1996. This modified waterline route is proposed to be located within approximately 10 feet of the existing sewer line. This additional line would also connect to the existing City waterline along SR-338 (Attachment 1).

TVA anticipates the receipt of a Section 26a application for additional shoreline stabilization work in the foreseeable future. SWS, on behalf of the landowner, Mr. McCroskey, wants to conduct bank stabilization work at the confluence of the French Broad and Little Pigeon rivers at McCroskey Island including the adjacent inland banks. Similar to bank stabilization previously authorized along the treatment plant shoreline, SWS would either use acceptable bioengineering practices or it would avoid excavating or reshaping the riverbank, place rock underlain with filter fabric, and place rock from the river by barge to minimized soil and vegetation disturbance along this shoreline.

Construction Methods:
The rerouted water main pipelines would be installed by means of an open-cut ditch across the back channel of the French Broad River. These sections of the main lines would be installed in a casing pipe and be buried a minimum of 4-feet below the bottom grade of the existing river channel. The river trench and banks would be backfilled with Class B riprap to approximate the original bottom contour. No excess spoil would remain in the river upon completion of construction.

Like previously approved work in the French Broad River, work on the finished water main pipelines (river) crossing would be coordinated with TVA's River Operations, River Forecast Center staff so that, if needed, controlled or reduced flow conditions from Douglas Dam can be achieved. Work would be conducted during times of low river flows such as early spring when filling Douglas Reservoir is an operations priority. During this time, flow in the back channel of the French Broad River around McCroskey Island is minimal.

Attachment 1 shows:

- Sheet CP1.0 - Plan View of 16-inch finished water main. This line was previously approved to be a 36-inch main.
- Sheet CP1.1 - Cross Sectional Detail of 16-inch water main crossing.
- Sheet CU1.6A - Plan View of all water main crossings. This includes the 16-inch and newly proposed 36-inch finished water mains, the 8-inch raw water main, and the existing 24-inch sewer force main.
- Sheet CU1.6A - Cross Sectional Detail of 36-inch water main crossing. The drawing also includes a plan view of the 36-inch finished water main and the 8-inch raw water main.

From the river crossing, the finished waterline mains would parallel the existing 24-inch sewer main approximately 3,500 feet to the connection point along SR-338. This easement area lies within an open bottomland area presently used as pasture for cattle. This area has also been subjected to considerable disturbance from earthen trench work when the sewer line was originally installed in 1996 (Attachment 2).

Impacts Assessment
As previously documented in the January 31, 2005, original jointly-prepared U.S. Army Corps of Engineers (USACE) EA, the federally endangered snail darter (*Percina tanasi*) is known to occur both upstream and downstream of the project site in the French Broad River. One federally listed mussel, oyster mussel (*Epioblasma capsaeformis*) is reported to occur in the Little Pigeon River and potentially in the French Broad River. No state or federally listed mussels were collected during a November 2004 survey in the vicinity of the

treatment plant intake and common mussels were relocated from the impact area. Similarly, no suitable snail darter spawning habitat occurs in the immediate vicinity of the river pipeline crossing (FBRM 27.3). Also, this island back channel would provide, at best, marginal transient habitat for snail darters or any mussel species of concern. Working under low flow conditions would minimize downstream turbidity. With already agreed upon mitigation, additional disturbance in this previously disturbed area, would have no effect on either of these species.

Because of the way the work would be conducted, this proposed bank stabilization has no potential to affect archaeological resources. However, although previously disturbed, work to install new water main lines within the easement area along the existing 24-inch sewer line has the potential to affect undiscovered archaeological resources (Attachment 2). Pursuant to 36 Code of Federal Regulations [CFR] Part 800, USACE served as the lead federal agency for compliance with Section 106 of the National Historic Preservation Act. By letter dated June 9, 2006, the Tennessee Historical Commission, State Historic Preservation Officer (TN SHPO), concurred with a USACE determination that there is only a minor potential for intact archaeological resources within the previously disturbed right-of-way (Attachment 3). Given the proximity of significant archaeological resources to this additional utility line, the TN SHPO further concurred that a qualified professional archaeologist would be onsite during all ground-disturbing activities to monitor the excavation for the presence of archaeological resources. All construction activities would immediately cease and the TN SHPO and all other consulting parties would be contacted if any resources are encountered. Subject to these restrictions, the proposed modifications will have no effect on archaeological resources.

Mitigation

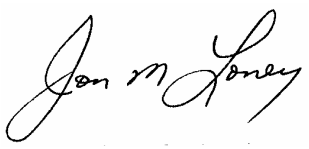
SWS would continue to coordinate its construction schedule with TVA's River Forecast Center and ensure that in-stream work is conducted during appropriate low river flow conditions. SWS would have a qualified archaeologist onsite during construction to ensure that any inadvertently discovered archaeological resources are properly handled. This would include immediate cessation of work and notification to the TN SHPO and other parties as appropriate. Mitigation measures include in the Memorandum of Agreement Pursuant to Section 106 of the National Historic Preservation Act as Implemented by Regulations at 36 CFR § 800 Concerning McCroskey Island (Archaeological Site 40Sv43), signed in January 2005, would continue to remain in effect.

SWS would continue to abide with all mitigation measures and other environmental protection commitments included in its previous USACE authorization dated February 4, 2005, as well as the TVA Section 26a approval, also issued on February 4, 2005.

Once an additional Section 26a application is received, TVA would review this FONSI to ensure that plans are consistent with this assessment. SWS would avoid excavating or reshaping the riverbank, would underlay rock with filter fabric, and would place rock from the river by barge or use similar bioengineer techniques that minimize shoreline disturbance while effectively placing armor on the shore. SWS would provide evidence of adherence with these measures.

Conclusion and Findings

Based on the above analysis of potential affects, as described, along with SWS observance of other mitigation measures included in the January 31, 2005, original USACE EA, February 4, 2005 TVA FONSI, and subsequent approvals, we conclude that modifying project construction methods to allow an additional French Broad River back channel stream crossing, will not have a significant impact on the quality of the environment. This evaluation and conclusion includes the proposed additional shoreline stabilization on Mr. McCroskey's property at the confluence of the French Broad and Little Pigeon Rivers at McCroskey Island and the adjacent inland banks as well as use of measures to protect potentially occurring archaeological resources along the existing sewer line easement. The previous FONSIs and files memorandum are still valid. Accordingly, an environmental impact statement is not required.



July 7, 2006

Jon M. Loney, Manager
NEPA Policy
Environmental Stewardship and Policy
Tennessee Valley Authority

Date Signed

Attachment 1

Jordan Jones and Goulding Request
and Revised Plans of January 16, 2006

JORDAN
JONES &
GOULDING

9725 Cogdill Road, Suite 101
Knoxville, Tennessee 37932
T 865.966.1000
F 865.966.1099
www.jjg.com

January 16, 2006

Mr. J. Ruben Hernandez
U.S. Army Corps of Engineers
Nashville District
3701 Bell Road
Nashville, TN 37214-2660

Re: City of Sevierville Water Treatment Plant

Dear Mr. Hernandez:

On January 10, 2006, representatives from Jordan, Jones & Goulding, Inc. (JJG), Tennessee Valley Authority (TVA) and City of Sevierville (City), met onsite at the McCrosky Island Water Treatment Plant to discuss an additional water line crossing to be located to the east of the previously approved line crossing. This proposed crossing would be a 36-inch diameter water main and would reduce the size of the previously approved water main crossing to a 16-inch diameter main.

We feel that the additional 36-inch water main crossing from the water treatment plant would allow CITY to better serve their customers by providing a second source of treated water to the system. This second feed would also provide a better alignment for installation by being installed at a lower elevation there would be a possibility for lower head pumps. The cost of installation would also be reduced due to CITY planning to install the water main in an existing utility easement alongside an existing 24-inch waster water force main.

The proposed additional water main would be installed no less than 10-feet from the existing sewer force main and would connect to the CITY system near the location of future road improvements to the Highway 66 area. The location of the installation would also help to reduce the possible impacts to cultural resources due to the area within the easement most likely have been previously disturbed during the sewer force main installation.

The additional river crossing would be done in conjunction with the previously approved line crossing to the west to reduce the impacts to the river. At this time it is not believed that the area contains habitat suitable for sustaining river mussels. The construction would also be done in conjunction to avoid the snail darter spawn and would also be done during times of low flow in the river.

At this time we wish to request an amendment be made to the existing permit to allow this additional crossing. I am enclosing a plan view drawing of a USGS topographic map which shows the location of the additional water main crossing, the previously approved water main crossing and the existing waste water force main.

I hope that this provides the information that you need. If you have any questions or require any additional information, please feel free to contact us.

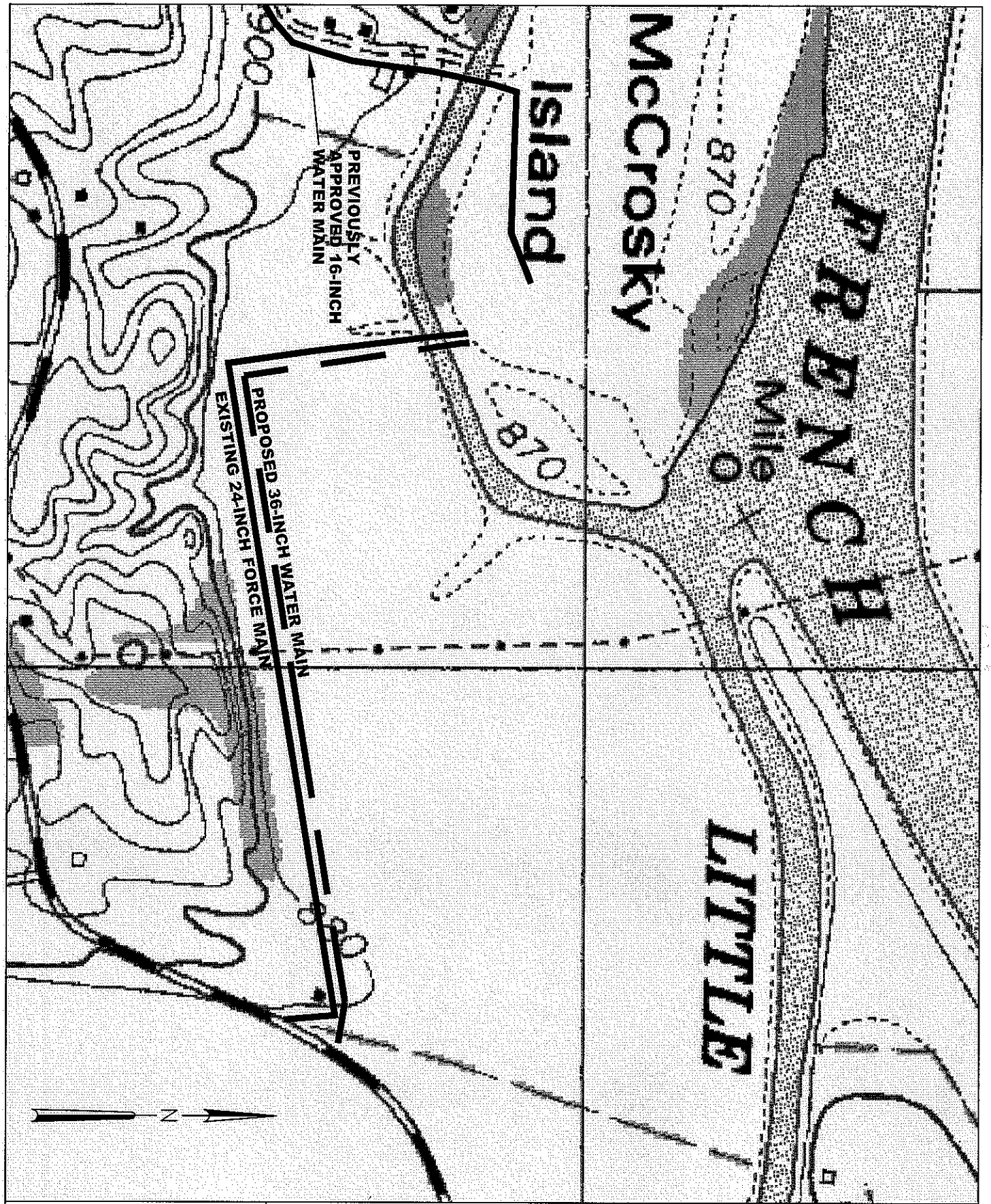
Sincerely,

JORDAN, JONES & GOULDING, INC.

Ryan D. Blake

Enclosures

Cc: Mr. Steve Flynn – City of Sevierville
Mr. Freddie Bennett – TVA
Mr. Stan Davis - TVA



JORDAN JONES & GOULDING

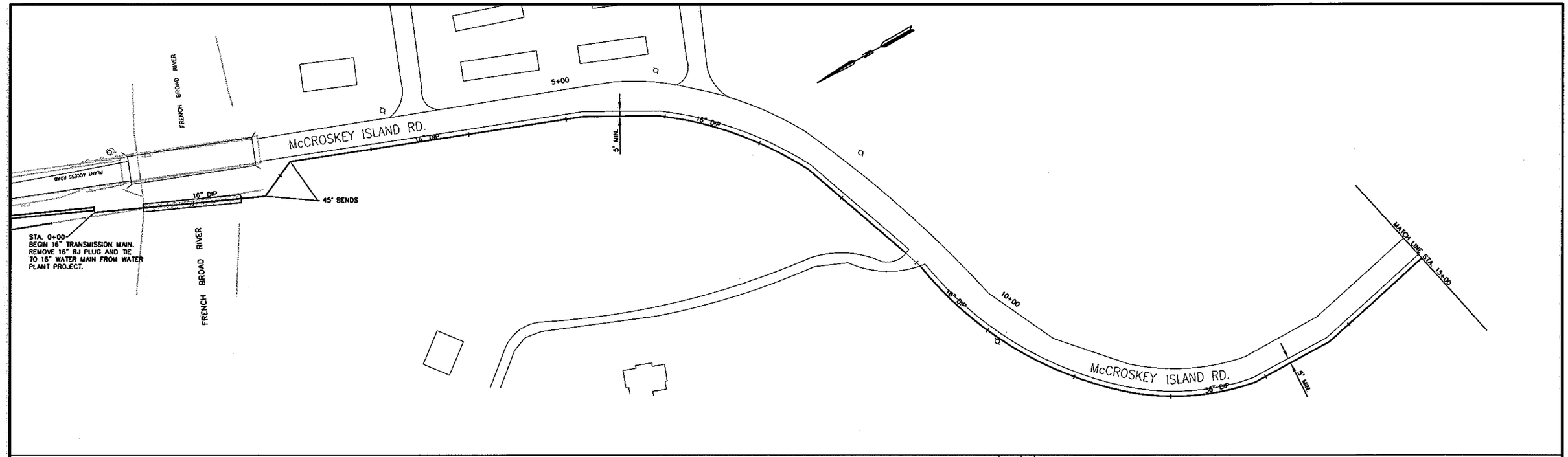
SEVIERVILLE WATER SYSTEMS

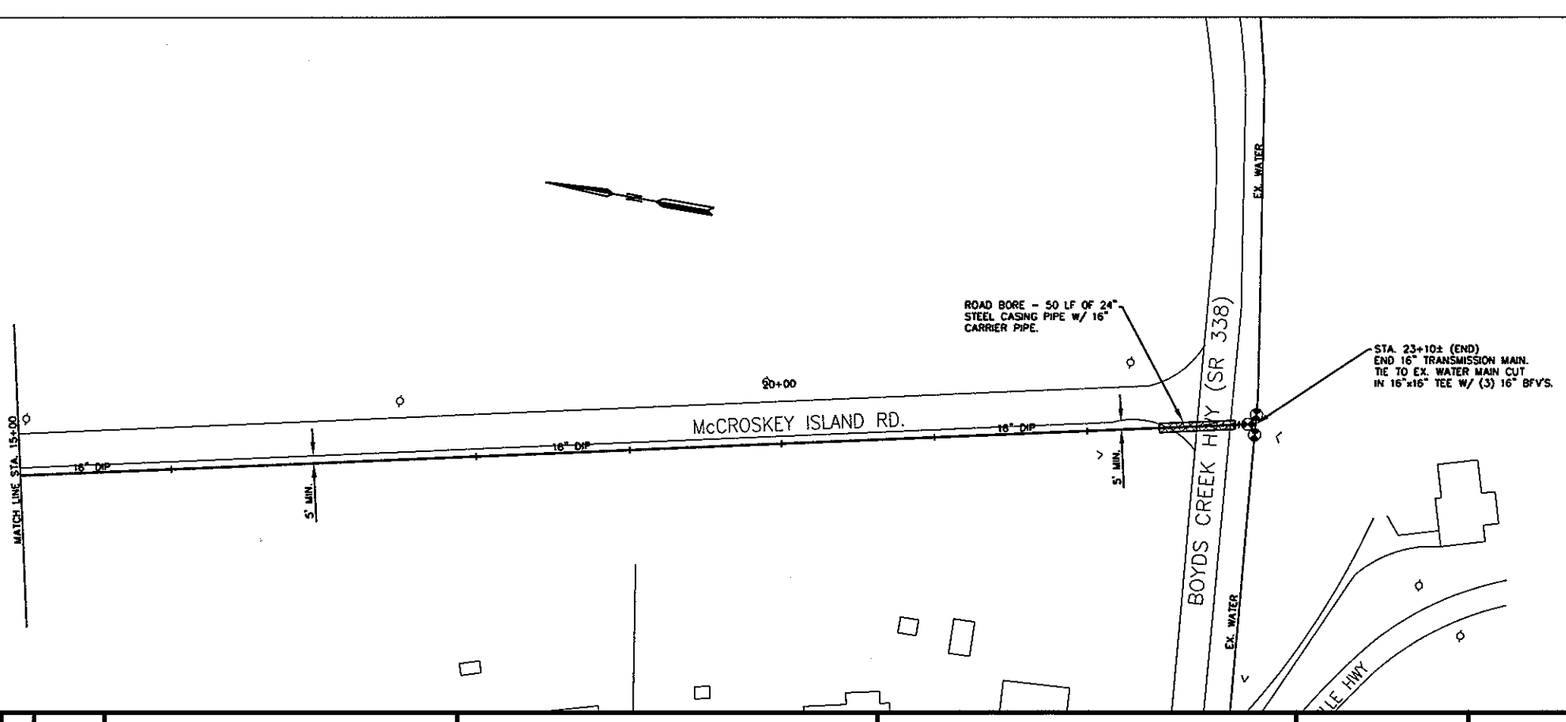
McCROSKEY ISLAND
WATER TREATMENT PLANT

DATE : JANUARY 2006

SCALE : 1" = 500'

JOB NO.: 02039051





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SHARMON

NO.	DATE	DESCRIPTION OF REVISION
0	07-09-04	INITIAL ISSUE

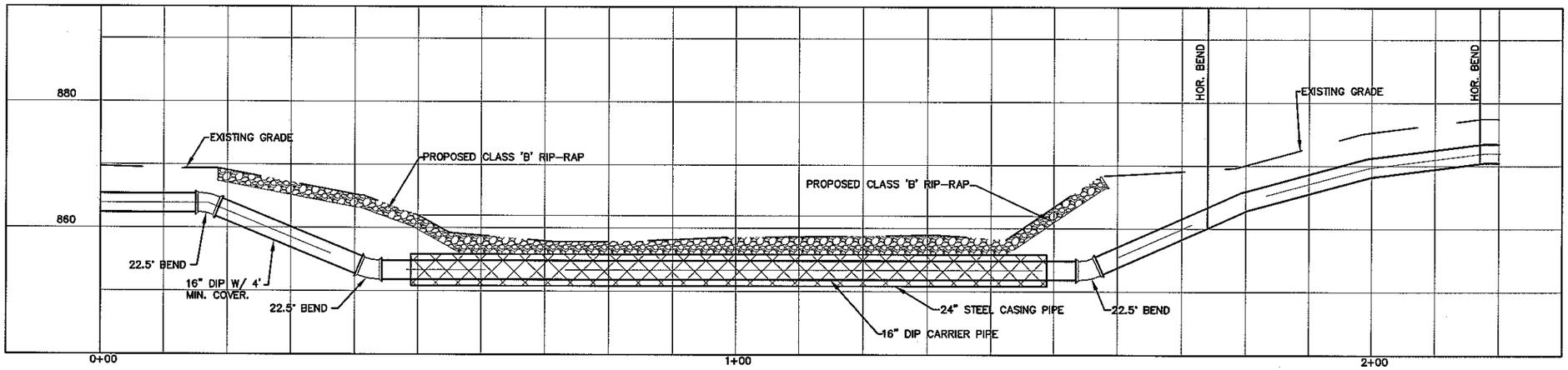
JORDAN JONES & GOULDING

Sevierville WATER SYSTEMS

McCROSKEY ISLAND
WATER TREATMENT PLANT

UTILITY PLAN

DESIGNED: TJP	CHECKED: TW / MA	DATE: JULY 2004	CP1.0	0
DRAWN: SDH	JOB NO. 2039.051	SCALE: AS SHOWN	SHEET	REV



RIVER CROSSING SECTION

1" = 10' HOR.
1" = 10' VERT.

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NO.	DATE	DESCRIPTION OF REVISION
0	07-09-04	INITIAL ISSUE

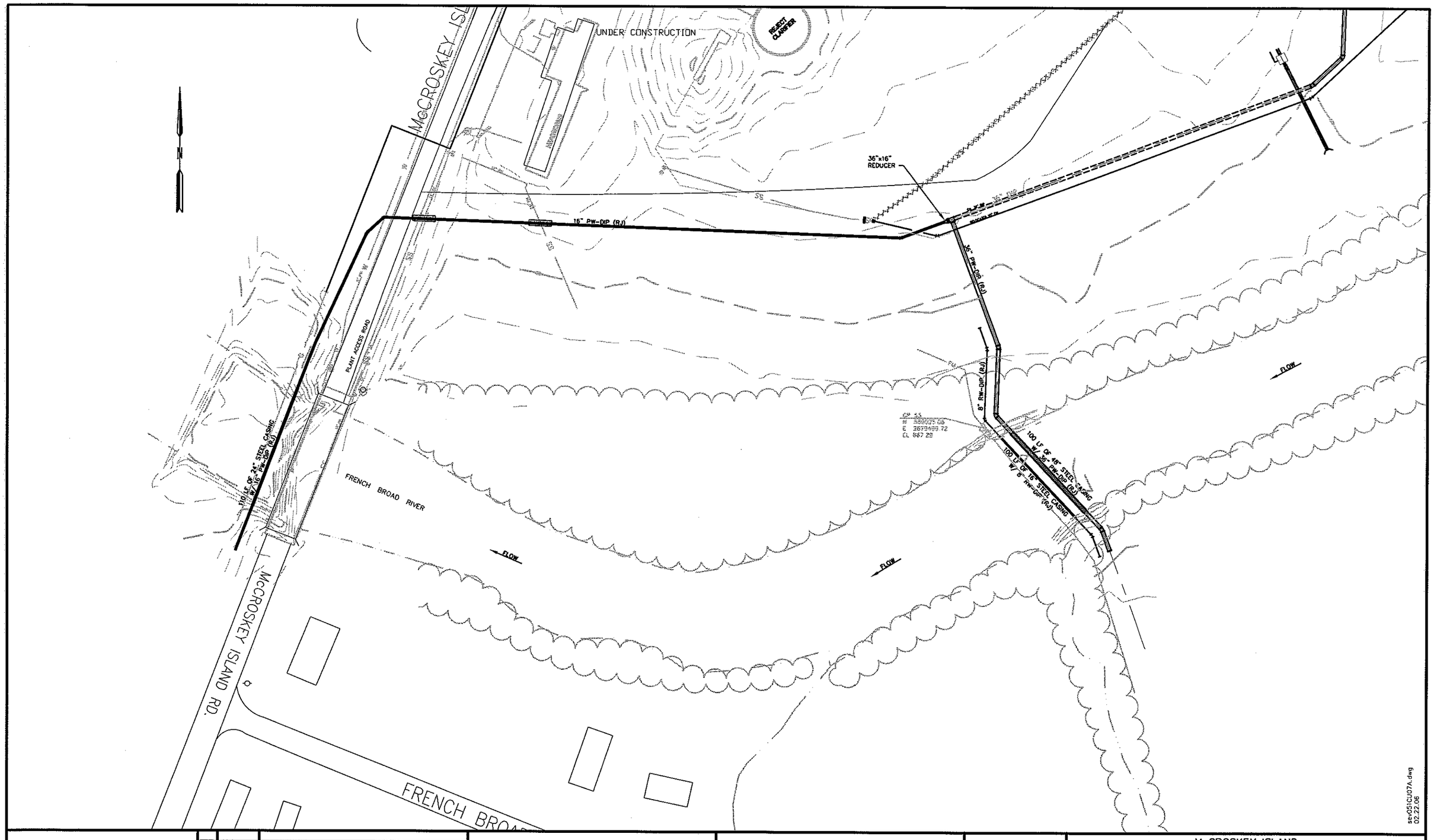
JORDAN JONES & GOULDING

Sevierville WATER SYSTEMS

McCROSKEY ISLAND
WATER TREATMENT PLANT

UTILITY PROFILE

DESIGNED: TJP	CHECKED: TW / MA	DATE: JULY 2004	CP1.1 SHEET	0 REV
DRAWN: SDH	JOB NO. 2039.051	SCALE: AS SHOWN		



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NO.	DATE	DESCRIPTION OF REVISION
0	07-09-04	INITIAL ISSUE

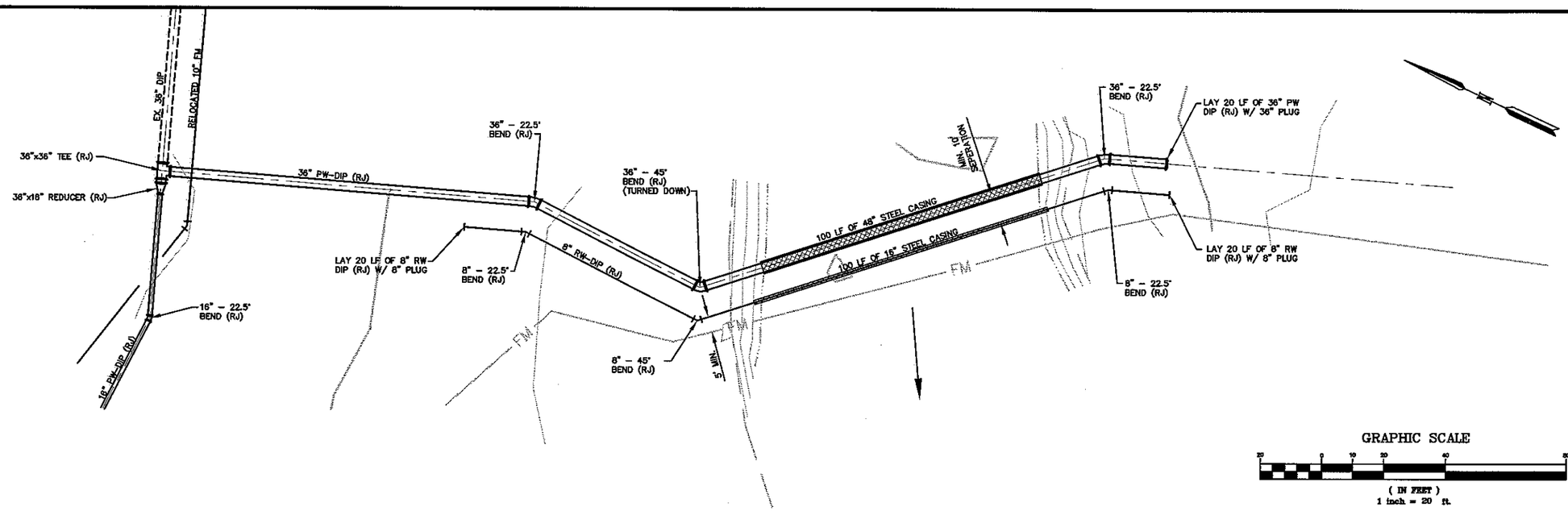
JORDAN JONES & GOULDING

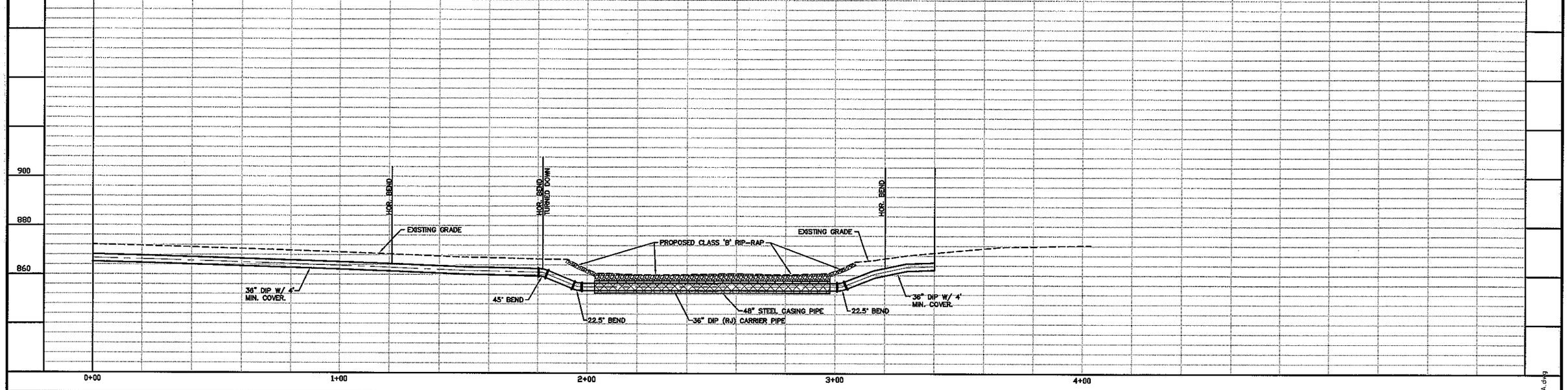
Sevierville WATER SYSTEMS

McCROSKEY ISLAND
WATER TREATMENT PLANT

SITE LOCATION MAP

DESIGNED: RB	CHECKED: TW / MA	DATE: JULY 2004	CU1.6A SHEET	0 REV
DRAWN: SDH	JOB NO. 2039.051	SCALE: 1"= 40'		





PROFILE

HORIZONTAL: 1" = 20'
VERTICAL: 1" = 20'

NO.	DATE	DESCRIPTION OF REVISION
0	07-09-04	INITIAL ISSUE

JORDAN JONES & GOULDING

Sevierville WATER SYSTEMS

McCROSKEY ISLAND
WATER TREATMENT PLANT

UTILITY PLAN
36' RIVER CROSSING

DESIGNED: RB	CHECKED: TW / MA	DATE: JULY 2004	CU1.6A SHEET	0 REV
DRAWN: SDH	JOB NO. 2039.051	SCALE: AS SHOWN		

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THIS LINE ——— IS ONE INCH LONG WHEN PLOTTED FULL SCALE

SHARMON

Attachment 2

Letter from Richard R. Polhemus, Polhemus Archaeological Consulting, to Ryan D. Blake, Jordan Jones and Goulding, dated May 13, 2006

Richard R. Polhemus, PhD, RPA
Polhemus Archaeological Consulting
1868 Old Newport Highway
Sevierville, Tennessee 37876
(865) 429-5631
rrpolhemus@aol.com

May 13, 2006

Ryan D. Blake
Jordan, Jones, & Goulding, Inc.
9725 Cogdill Road
Suite 101
Knoxville, TN 37932

Dear Mr. Blake,

Per our telephone conversations and my discussion with Ruben Hernandez at our meeting on April 18, 2006, this letter addresses the degree of previous disturbance along the route of the proposed finished water line from McCroskey Island to Boyds Creek Road. As I understand it, the route of the new water line will follow that of the existing 24" force main, with a 10 foot offset.

When I observed portions of the construction trench during installation of the force main in the summer of 1996, the trench was wide enough at bedrock depth to accommodate a track hoe, with each side sloped for safety reasons, resulting in a disturbed zone between 30 and 40 feet in width. Construction photographs examined in preparation for this letter confirm the form of the extant force main trench. Thus if the new shallower water line parallels the existing pipeline with the indicated offset, it will be situated entirely within the previously disturbed fill of the existing pipeline.

Only if there is a significant deviation from the existing pipeline route is there a likelihood of encountering undisturbed soils.

As the suggested field confirmation of the extent of previous disturbance was not possible due to the land owners wishes, I recommend that initial construction on the pipeline segment that crosses the bottom opposite McCroskey Island be monitored to confirm the anticipated degree of previous disturbance.

Sincerely,

Richard R. Polhemus, PhD, RPA

Attachment 3

Tennessee Historical Commission State Historic Preservation Officer Consultation Response of June 9, 2006

TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

June 9, 2006

Mr. J. Ruben Hernandez
U.S. Army Corps of Engineers, Nashville District
Regulatory Branch
3701 Bell Road
Nashville, Tennessee 37214

RE: COE-N, MCCROSKY ISLAND PLANT/UTILITY LINE, SEVIERVILLE, SEVIER COUNTY

Dear Mr. Hernandez:

The above-referenced undertaking has been reviewed with regard to National Historic Preservation Act compliance by the participating federal agency or its designated representative. Procedures for implementing Section 106 of the Act are codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739).

We concur with your agency that there is only a minor potential for intact archaeological resources within the previously disturbed utility line right-of-way. Given the proximity of significant archaeological resources to this additional utility line, we further concur that a qualified professional archaeologist should be on-site during all ground-disturbing activities to monitor the excavation for the presence of archaeological resources. Should resources be identified, all activities in the immediate area must stop and this office and all other consulting parties notified. At the completion of construction, please provide this office with a brief letter report on the archaeological monitoring activities.

Please inform this office if this project is canceled or not permitted by the federal agency. Questions and comments may be directed to Jennifer M. Barnett (615) 741-1588, ext. 17.

Your cooperation is appreciated.

Sincerely,

Herbert L. Harper
Executive Director and
Deputy State Historic
Preservation Officer

JUN 15 2006

HLH/jmb